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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,877	02/19/2004	Peter Kochersperger	1857.2140000/MVM/MKH	1990
26111 7590 04/18/2007 STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER DUONG, KHANH B	
			ART UNIT	PAPER NUMBER
			2822	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/780,877

Applicant(s)

KOCHERSPERGER, PETER

Examiner

Khanh B. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-23 is/are pending in the application.
- 4a) Of the above claim(s) 15-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-14 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 5, 2007 has been entered.

Response to Amendment

Accordingly, claims 1-11 were canceled, and claims 13 and 14 were amended.

Claims 15-22 remain withdrawn from further consideration.

Currently, claims 12-14 and 23 are active.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Oglesbee (U.S. Patent No. 4,744,550).

Re claim 12, Oglesbee discloses in figs. 1-2 a wafer holder 10 comprising: a wafer chuck 5 configured to receive a wafer 7; and an expander 3 coupled to the wafer chuck 5 to expand the wafer chuck 5 and create an inherent initial stress at an interface between the wafer 7 and the wafer chuck 5 [see col. 2, lines 57-64]. Oglesbee further discloses in fig. 6 the wafer chuck 5

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and the wafer are being simultaneously expanded by a vacuum in groove 25, wherein gaps 33 are formed between separated semiconductor devices 7 [see col. 3, lines 42-56]. Thus, in order for the semiconductor devices 7 to be initially separated from each other, an initial stress must exist at an interface between the wafer 7 and the wafer chuck 5 when the wafer chuck 5 is being initially expanded by the vacuum.

Furthermore, the recitation “[a] lithography system configured to reduce wafer slipping” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88USPQ 478 (CCPA 1951).

Claims 12-14 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Getchel et al. (U.S. Patent No. 6,375,176).

Re claim 12, Getchel et al. (“Getchel”) expressly discloses in FIGs. 9A and 11A wafer holder comprising: a wafer chuck 500 configured to receive a wafer; and an expander 532 coupled to the wafer chuck 500 to expand the wafer chuck 500 (by heating) and create an inherent initial stress (by heating) at an interface between the wafer and the wafer chuck 500.

Furthermore, the recitation “[a] lithography system configured to reduce wafer slipping” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88USPQ 478 (CCPA 1951).

Re claim 13, Getchel expressly discloses in the same figures the expander 532 comprises an annular tube 580 coupled to said wafer chuck 500.

Re claim 14, Getchel expressly discloses in the same figures said annular tube 580 is coupled to an outer edge of said wafer chuck 500.

Re claim 23, Getchel discloses said expander 532 is configured to expand (by heating) said wafer chuck 500 in an inherently uniform manner [see col. 15, lines 13-18 and col. 16, lines 10-12].

Response to Arguments

Applicant's arguments with respect to the amended claims have been considered but are moot in view of the new ground(s) of rejection. However, Applicant's arguments with respect to the rejection of claim 12 under Oglesbee have been fully considered but they are not persuasive.

Applicant persistently argues that Oglesbee does not disclose "initial stress at an interface between the wafer and the wafer chuck". In response, the Examiner respectfully disagrees because Oglesbee, as previously discussed above, discloses in fig. 6 the wafer chuck 5 and the wafer are being simultaneously expanded by a vacuum in groove 25, wherein gaps 33 are formed between separated semiconductor devices 7 [see col. 3, lines 42-56]. Thus, in order for the semiconductor devices 7 to be initially separated from each other, an initial stress must exist at an interface between the wafer 7 and the wafer chuck 5 when the wafer chuck 5 is being initially expanded by the vacuum.

Applicant further argues that there is no change in stress on an interface between the devices 7 and the wafer chuck ("the film") 5 since the devices 7 are being separated by the same amount that the wafer chuck 5 is stretched. In response, the Examiner respectfully disagrees

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because there must exist an initial stress at an interface between the wafer 7 and the wafer chuck 5 when the wafer chuck 5 is being initially expanded by the vacuum. Evidence for such initial stress is expressly shown by Oglesbee in figs. 5 and 6 wherein the wafer chuck 5 is shown as a stretchable element while the devices 7 are shown as breakable elements. Thus, in order for the semiconductor devices 7 to be initially broken from each other, an initial stress must exist at an interface between the wafer 7 and the wafer chuck 5 when the wafer chuck 5 is being initially expanded by the vacuum. Otherwise, the devices 7 would not have been separated so as to have gaps 33 formed between the devices 7.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Duong whose telephone number is (571) 272-1836. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith, can be reached on (571) 272-2429. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KBD
Zandra V. Smith
Supervisory Patent Examiner

16 April 2007